Lockport

Lo-K

K—VALUE .24

INSULATION

for homes,
farm buildings,
apartment houses,
public buildings,
industrial uses,
cold storage.

LOCKPORT COTTON BATTING CO.

LOCKPORT, N. Y.

established 1870

A MODERN IMPROVEMENT OF A WORLD-KNOWN INSULATION

Lo-K, one of the most modern insulating materials on the market, has exactly what its name suggests—*low thermal conductivity* or low "K" value. It is made of a plentiful and distinctly American product—cotton—thoroughly flameproofed and backed with a tough water resisting paper which also acts as a vapor barrier. It answers today's problem of insulation with all of the soft, fluffy warmth of a cotton comfort.

For centuries cotton has been used for protection and warmth. The development of cotton as an insulation is a natural outgrowth of the acceptance of a basic insulating principle. As specially processed by the Lockport Cotton Batting Company it has proved so amazingly efficient that it is a logical first-choice for general insulation purposes.

FLAMEPROOFED UNDER DEPARTMENT OF AGRICULTURE SPECIFICATIONS

Made fire resisting by Lockport's patented method of treating cotton to resist combustion, Lo-K is approved by the United States Department of Agriculture, manufactured under the rigid specifications and under the personal supervision of a Department of Agriculture inspector permanently assigned to our plant. Even when subjected to the flame of a blow torch at 1800°F. for 20 minutes, Lo-K does not support combustion.

RESISTANT TO MOISTURE

The asphalt-coated kraft paper nails firmly to studding to form a vapor barrier. In addition, cotton is itself normally resistant to moisture. (Absorbancy is induced only by a treatment not employed in manufacturing Lo-K.) Toss a piece of Lo-K on water—it floats indefinitely.

LIGHT WEIGHT BRINGS SAVINGS

Cotton weighs only .85 lb. per cubic foot. It is many times lighter than most insulations on the market today. See comparative weights in table on this page.

★ SPEEDS INSTALLATION

Lo-K's extremely light weight means easier and faster installation, at a saving in labor costs (according to Government bulletins) as high as 40%. Carrying and moving of packages of Lo-K on the job is speeded. You can take on more insulating jobs with Lo-K than with heavier insulations.

★ EASILY HANDLED

Lo-K gives you lower rail or truck transportation cost per thousand square feet. Its lighter weight also makes it easier to warehouse, more convenient and economical to load on cars and trucks. On the job, handling of Lo-K is faster—this means lower labor costs.

★ NON-SETTLING

The light weight of Lo-K means long life. It stays permanently in place because it is LIGHT and therefore does not sag or settle. In addition, the fine kinky fibres of cotton have a natural tendency to cling to each other, and to rough surfaces . . . locking themselves to the framing members. Lo-K is made extra wide to make this locking process sure and secure. This assures years of trouble-free service.

★ RESISTS MILDEW AND ROT

Lo-K has a definite and built-in resistance to mildew, rot and decay. By a special process perfected by the Lockport Cotton Batting Company, the chemical treatment incorporates a definite barrier to the ravages of fungus and bacteria growth.

★ RESISTS VERMIN

Governmental tests prove Lo-K cotton insulation resists vermin. There is nothing of food value in cotton which will permit them to live and the chemical treatment acts as an effective barrier against infestation of termites, moths, beetles and other pests. These same tests prove that treated cotton insulation not only offers no food value or encouragement to rodents, but that they show a definite aversion to cotton insulation prepared in accordance with Department of Agriculture specifications.

★ NON-IRRITATING

One of the major problems in installing old-fashioned insulation has been the irritation to the hands of those working with the product. Lo-K gives you no "irritation itch." Its treatment is by non-irritating chemicals and none of the harsh abrasive fibres found in some other materials are present in cotton. Try the test yourself. Rub it on the back of your hand or face.

INSTALLATION OF Lo-K Because of its light weight and ease of handling, you will find that Lo-K installs more economically than many other insulating materials. The ample length of the rolls means less piecing, no gaps in the insulation where drafts or excessive moisture may penetrate and greater general efficiency.

Lo-K should be installed with the paper on the warm side. On the ceilings this means the vapor-barrier paper should be down, and on the side walls the paper would be toward the inside of the house. Convenient nailing flanges on the vapor-barrier paper can be attached to the face of the framing members.

Many contractors and architects prefer additional insulating value of a dead air space between the vapor-barrier paper and the inside finish. This type of construction requires that the nailing flange be stapled to the side of the framing members at a 90°-degree angle to the plane of the cotton.

In side-wall construction, in knee-wall areas, or in sloping roof rafters, it is recommended that the cotton and the paper be stapled to the plate at the top of the area. This will hold the cotton firmly in place.

HIGHLY EFFICIENT, *Easy* TO HANDLE

EASY AND FAST TO INSTALL IN ATTIC FLOORS AND WALLS

Watch Lo-K being installed. It is easily handled. Its convenient size—15 in. wide, and ample roll length—meets standard construction. Its backing of tough moisture-resisting paper has a 1¼ in. flange to take the nailing—and leave the cotton free. And the light weight of this new insulation speeds installation appreciably—at a saving in time of 25 to 40%.

HIGH INSULATING *Efficiency* LOW THERMAL CONDUCTIVITY

"K" Factor is .242

Compare the thermal conductivity of Lo-K insulation with any of the other insulating materials on the market today. This comparison alone would be convincing proof of Lo-K's superiority. The "K" factor (for 1 in.) is only .242 or anywhere from 10 to 40% more efficient than other recognized insulation materials.

Thus Lo-K has a lower thermal conductivity than rock wool, glass wool, corkboard or chemically treated wood fibers.

It has a "K" value 52 times more efficient than that of stone or stucco, and 4 times better than hollow tile or yellow pine.

Tests by Recognized Laboratories

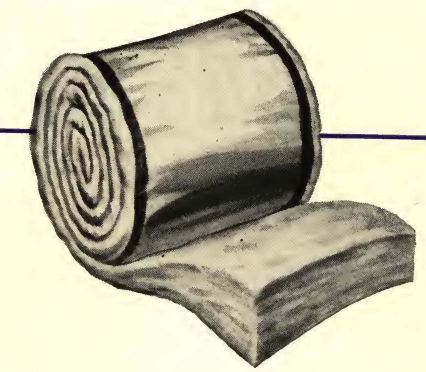
Material	Description	Wt. per cu. ft.	Insulating Value	
			*("K" factor)	Authority
Cotton	Cotton fibers highly treated	.85	.242	J. C. Peebles
Rock Wool	Fibrous material made from rock	10.00	.268	Bureau of Standards
Mineral Wool	Fibrous material made from slag	10.50	.310	Bureau of Standards
Glass Wool	Fibrous material made from glass slag	1.50	.270	Bureau of Standards
Balsam Wool	Chemically treated wood fiber	3.62	.250	Bureau of Standards

*"K" factor means the amount of heat expressed in British Thermal Units transmitted in 1 hour through 1 sq. ft. of a homogeneous material 1 in. thick for a difference in temperature of one degree Fahrenheit between the two surfaces of the material. The lower the factor, the better the insulation. This table of values is taken from the Department of Agriculture Bulletin "Cotton Insulation in Potato Storage House Construction."

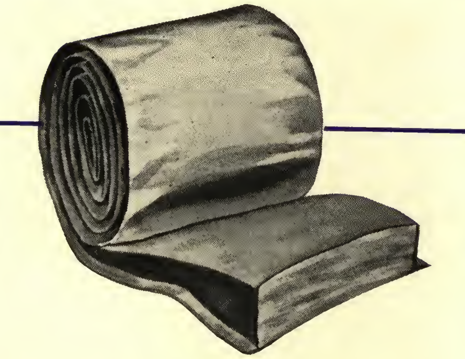
See Following Page

New Members of the Family of Lo-K *Insulation*

CLOSED BLANKET—For easier handling and application a breather paper covers the top of the cotton. It permits the evaporation of natural moisture condensation in the insulation.



OPEN FOIL—Aluminum foil used as the backing of this type gives complete vapor barrier protection, and the foil stops 90% of heat loss by radiation. This means greater protection against heat loss by convection and conduction.



CLOSED FOIL—Tops in Lo-K's Insulation offerings. Aluminum foil backing for maximum heat resistance and vapor protection plus breather paper cover over the cotton. The maximum in efficiency and in ease of application.

Increasing COMMERCIAL USES FOR Lo-K

The marked superiorities of Lo-K in home insulation have brought to light many industrial uses where the quality of Lo-K make it preferred. A few such uses mentioned here may suggest others in your line of business where Lo-K can save money and give you a better product.

REFRIGERATION — DEEP FREEZE UNITS — LOCKERS The greater thermal efficiency of Lo-K, based upon its lower "K" value, has prompted its repeated use in this important field. Its much lighter weight has made for easier installation, more economical shipping cost of finished product and has reduced condensation problems to a minimum.

These features apply particularly for extreme low temperatures and for freezing units. Navy locker plants or walk-in units require special sizes or thickness of Lo-K — which are most effectively installed and produced at small increased cost.

HOT WATER HEATERS Lo-K has been used extensively in this field where light weight and superior thermal resistances are vital. Knob and Tube wiring tests conducted by the Canadian Standards Association of Toronto show that Lo-K may be used with safety in connection with electrical wiring.

TRUCKS, TRAILERS AND FREIGHT CARS The need here is for an insulating material which can give good resistance to heat flow without burdening thickness, which will not add materially to the weight of the vehicle, and thus reduce pay load capacity. These requirements relate to two of the greatest advantages of Lo-K.

PREFABRICATED HOUSES Lo-K Insulation has specialized in the "Prefab" field. Lower "K" factor, economy in installing and in shipping weight of Lo-K apply especially to the production line operation. Lo-K serves the prefabricator better because it can be compressed and requires less storage space for a given number of square feet.

LO-K ACOUSTICAL BLANKET Exhaustive tests by the Bureau of Standards in Washington have established the merit of Lo-K Insulation in the Acoustical Field. Sound must be controlled in two ways for complete efficiency.

The first of these is to reduce sound at its source by absorption. In this, Lo-K behind perforated asbestos board or perforated metal pans has a noise reduction factor as high as .75. This compares very favorably with other materials used for this purpose. One interesting point in these Bureau of Standards tests shows that Lo-K Acoustical Blanket has the best efficiency in the lower cycles which predominate in the usual sound background of home, office or public building.

The second method of sound control has to do with reducing the transmissions of sound from one room to another. Here Lo-K Acoustical Blanket of a two-inch thickness will reduce 36.7 decibels of sound. Fifty to sixty decibels is about the loudness of sound in a fairly busy office. This means that two inches of Lo-K, installed in a wall, will effectively bar the passage of sound in the average office and an even greater proportion in a normal home. If Lo-K were used within a room in office or home as sound absorber and the walls were treated for sound transmission it is obvious that no sound would pass from origin to another room in a busy office.

In acoustical use Lo-K offers special features of cleanliness and light weight. No particles of shot or dirt come through the facing material and load strain is materially reduced by the light weight of Lo-K. Used as an acoustical material Lo-K offers the same superiority of thermal efficiency and fire resistance.

SPECIAL STORAGE PROBLEMS

POTATO STORAGE Moisture condensation is a major problem in insulating potato storage. Because of the wide temperature differences involved and because of the moisture given off by the potatoes themselves, excessive moisture loaded and froze the insulation in previous materials used.

It has been proven conclusively in actual use that cotton insulation will neither hold moisture nor freeze, thus giving perfect protection.

TOBACCO STORAGE This insulation use presents a special problem. In storing and curing tobacco an even temperature with plenty of ventilation in the sides of the structure and no excessively warm area near ceiling or roof are essential elements. Lo-K's uniform thickness, extra thermal efficiency and light weight have made it preferred for this purpose.

LOCKPORT COTTON BATTING CO.

ESTABLISHED 1870

MAIN OFFICE AND PLANT: LOCKPORT, NEW YORK

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